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DOCKET NO.: MSFT-2850/306820.01

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

The Application of:

Rajeev B. Rajan, et al.

Confirmation No.: 8383

Application No.: 10/692,227

Group Art Unit: 2171

Filing Date: October 23, 2003

Examiner: Not Yet Assigned

For: SYSTEM AND METHOD FOR STORING AND RETRIEVING A FIELD OF A

USER DEFINED TYPE OUTSIDE OF A DATABASE STORE IN WHICH

THE TYPE IS DEFINED

DATE OF DEPOSIT: HCM 27, 2005

I HEREBY CERTIFY THAT THIS PAPER IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL, POSTAGE PREPAID, ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO THE UNITED STATES PATENT AND TRADEMARK OFFICE, P.O. BOX 1450, ALEXANDRIA,

TYPED NAME: Steven B. Samuels REGISTRATION NO.: 37,711

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).

In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified

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	application, within three months of the date of entry into the national stage of
	the above identified application as set forth in § 1.491, before the mailing date
	of a first Office Action on the merits of the above-identified application, or
	before the mailing date of a first Office Action after the filing of request for
	continued examination under § 1.114, no additional fee is required.
	In accordance with § 1.97(c), this Information Disclosure Statement is being
	filed after the period set forth in § 1.97(b) above but before the mailing date of
	either a Final Action under § 1.116 or a Notice of Allowance under § 1.311, or
	before an action that otherwise closes prosecution in the application, therefore
	Certification in Accordance with § 1.97(e) is attached; or
	The fee of \$180.00 as set forth in § 1.17(p) is attached.
	In accordance with § 1.97(d), this Information Disclosure Statement is being
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	of Allowance under § 1.311 but before, or simultaneously with, the payment
	of the Issue Fee, therefore included are: Certification in Accordance with §
	1.97(e); and the submission fee of <u>\$180.00</u> as set forth in § 1.17(p).
\boxtimes	Copies of reference numbers 1 thru 22 listed on the attached Form PTO-1449
) · · · ·	are enclosed herewith.
	Copies of reference numbers 23 thru 44 on the attached Form PTO 1449 are
	not required to be submitted pursuant to 37 CFR § 1.98(a)(2)(i).
	Copies of references - are not being submitted because
	they were previously cited by or submitted to the U.S. Patent and
	Trademark Office in patent application number filed for

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PATENT

which a claim for priority under 35 U.S.C. § 120 has been made in the instant application.

There are no listed references which are not in the English language.

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050. This form is submitted in duplicate.

Date: fcm, 27, 2005

Steven B. Samuels
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Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office			Docket No MSFT-28	o. 50/306820.01	Application No. 10/692,227 -		
			Applicant Rajeev B. Rajan, et al.				
			Filing Date October 2		Group 2171		
O'	THE	R DOCUMENTS (Includ	ling Author	, Title, Date, Pe	ertinent Pages, Etc.)		
	1				ase Advances in an Object- ceedings, October 4-8, 1987,		
	2	Bhattacharya, S. et al., "Coordinating Backup/Recovery and Data Consistency Between Database and File Systems", <i>ACM SIGMOD</i> , June 4-6, 2002, 500-511					
	3	Biliris, A., "The Perform	ris, A., "The Performance of Three Database Storage Structures for Managing ge Objects", ACM SIGMOD, 1992, 276-285				
	4	Buneman, P. et al., "Inhe Languages", ACM, 1986	heritance and Persistence in Database Programming				
	5		, "DLFM: A Transactional Resource Manager", MOD, 2000, 518-				
	6	Khan, L. et al., "A Performance Evaluation of Storing XML Data in Relational Database Management Systems", WIDM, 2001, 31-38					
7 Leontiev, Y. et al., "On Type Systems for Object-Oriented Database Programmers," ACM Computing Surveys, December 2002, 34(4), 409-449							
	8		nd Managen		Data", SIGMOD Record,		
	9						
	10		nced Abstract Data Types in Object-Relational Databases", The				
EXAMINER		. 222 0000 1000, 12709 19	-30 - 10	DATE CONSI	DERED		

Form l	PTO	-1449 Modified	Docket No. MSFT-2850/306820.01	Application No. 10/692,227			
C	ited b	t and Publications by Applicant cheets if necessary)	Applicant Rajeev B. Rajan, et al.				
		nent of Commerce Trademark Office	Filing Date October 23, 2003	Group 2171			
O 7	THE	R DOCUMENTS (Includ	ling Author, Title, Date, Po	ertinent Pages, Etc.)			
	11	, , ,	ating Relational Databases I	ntional Databases. A System for Using Valid XML Documents",			
	12	Yoshikawa, M. et al., "XRel: A Path-Based Approach to Storage and Retrieval of XML Documents Using Relational Databases", ACM Transactions on Internet Technology, August 2001, 1(1), 110-141					
	13	Findler, R.B. et al., "Contract Soundness for Object-Oriented Languages" ACM Conference on Object-Oriented Programming Systems, Languages, and Applications, OOPSLA, 2001, 15 pages					
- ¥ -	14		"Structure Editors: User-Defined Type Values and Type 00 , 241-247				
	15	IEEE International Conf	ael Stonebraker, "Inclusion of New Types in Relational Data Base Systems", International Conference on Data Engineering, 1986, 1-19				
	16	Berg, C., "How Do I Create Persistent Java Objects?", Dr. Dobb's Journal, 1997, 22(4), 98-101					
	17	Concurrent Object-Orier	n, A.A., "Concurrent Aggregates (CA)-Design and Experience with a surrent Object-Oriented Language Based on Aggregates", J. Parallel and sibuted Computing, 1995, 25(2), 174-196 y, C., "Object Serializatin in Java 1.1. Making Objects Persistent", Web				
• • • • • • • • • • • • • • • • • • • •	18						
	19			Computer Journal, 1982, 25(3),			
	20			ed Types with Inheritance and on, 2000, Abstract Only, 2 pages			
EXAMINER			DATE CONS	,			

Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary)			Docket No. MSFT-2850/306820.01	Application No. 10/692,227
			Applicant Rajeev B. Rajan, et al.	
	-	nent of Commerce Trademark Office	Filing Date October 23, 2003	Group 2171
O	ГНЕ	R DOCUMENTS (Includ	ing Author, Title, Date, Per	rtinent Pages, Etc.)
	21 22	23(8), 32, 34, 36-37 King, et al., "TriStarp-Ar	e Structures", Proc. 8 Supppe	ementation and Exploitation of
1				-
EXAMINER			DATE CONSI	DERED

Form PTO-1449 Modified				Docket No. MSFT-2850/306820.01	Application No. 10/692,227		
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)				Applicant Rajeev B. Rajan, et al.			
U.S. Department of Commerce Patent and Trademark Office			Filing Date October 23, 2003				
		U. 9	S. PATENT	T DOCUMENTS			
Examiner Initial		Document No.	Date	Name	Class	Subclass	
	23	6,505,211	01/07/03	Dessloch, et al.	707	103Y	
	24	6,199,100	03/06/01	Filepp, et al.	709	203	
	25	6,223,344	04/24/01	Gerard, et al.	717	170	
	26	6,708,196	03/16/04	Atkinson, et al.	718	102	
	27	5,297,279	03/22/94	Bannon, et al.	707	103	
	28	5,437,027	07/25/95	Bannon, et al.	395	600	
	29	5,864,862	01/26/99	Kriens, et al.	707	103	
	30	6,564,205	05/13/03	Iwata, et al.	707	2	
	31	2002/0198891 A1	12/26/02	Li, et al.	707	102	
	32	5,900,870	05/04/99	Malone, et al.	715	866	
		FORE	IGN PATE	ENT DOCUMENTS		man to a to an a top and	
Examiner					Translation		
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Form PTO-1449 Modified				Docket No. MSFT-2850/306820.01	Application No. 10/692,227	
	Cite	tent and Publications d by Applicant al sheets if necessary		Applicant Rajeev B. Rajan, et al.		
U.S. Department of Commerce Patent and Trademark Office			Filing Date Group October 23, 2003 2171			
		U. 9	S. PATENT	T DOCUMENTS		
Examiner Initial		Document No.	Date	Name	Class	Subclass
	33	6,047,291	04/04/00	Anderson, et al.	707	103
	34	6,112,024	08/29/00	Almond, et al.	717	122
, 31 , 312,712	35	6,199,195	03/06/01	Goodwin, et al.	717	104
	36	6,338,056	01/08/02	Dessloch, et al.	707	2
-	37	6,370,541	04/09/02	Chou, et al.	707	103
	38	6,519,597	02/11/03	Cheng, et al.	707	10
	39	6,556,983	04/29/03	Altschuler, et al.	706	55
	40	6,578,046	06/10/03	Chang, et al.	707	4
	41	6,772,178	08/03/04	Mandal, et al.	707	204
	42	6,108,004	08/22/00	Medl	715	804
9, 44	43	2002/0091702 A2	07/11/02	Mullins	707	100
	44	2002/0152422 A1	10/17/02	Sharma, et al.	714	13
	<u> </u>	FORE	IGN PATI	ENT DOCUMENTS		
Examiner			Translation			
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